

Remarks and Arguments:

Claims 1, 7 and 11 have been previously cancelled. Claims 9 and 13 have been amended. Accordingly, claims 2 to 6, 8 to 10 and 12 to 13 remain for consideration in this application.

The Examiner has objected to claims 2-6, 8-10, 12-13 under 35 U.S.C. § 112, second paragraph for failing to particularly point out and distinctly claim the subject matter of the invention.

In response to the Examiner's objection to claim 9, this claim has been amended such that "said discharge chute" now reads - -said discharge end- -.

In response to the Examiner's objection to claim 13, this claim has been amended to identify each "nip" as either a - -first- - or - -second- - nip, and such that the expression "the single flat media elements" now reads - -the separated media elements- -.

The Examiner has rejected claims 2, 3, 5, 6, 8, 10 and 13 under 35 U.S.C. § 103(a) as being unpatentable over U.S. Patent 4,978,114 (Holbrook) in view of U.S. Patent 5,641,155 (Bridges) and further in view of U.S. Patent 6,550,764 (Wilson et al.). Applicant respectfully traverses this rejection for the reasons set out below. To that end, Applicant is incorporating by reference Applicant's Appeal Brief of July 24, 2007.

The present invention relates to a bottom feed dispenser for dispensing flat media stored in a media bin to a discharge chute along a feed path. The dispenser can be used for any type of media as disclosed in paragraph [0026] of the present description. However, this dispenser is specifically designed to handle heavy items, such as catalogues. The weight of such items generally makes it very difficult to feed them singly off the bottom of a stack. Prior art attempts have generally resulted in multiple items being drawn off the stack together rather than singly. In accordance with the principles of the invention, a coarse media separator comprising a first nip roller defining a first nip with the rear conveyor cooperates with the rear conveyor to feed media elements off the bottom of the stack on said rear conveyor in a flat shingled relationship. A driven front conveyor downstream of the rear conveyor forwards said flat media elements as single elements in a non-shingled relationship. A single media separator downstream of the rear conveyor receives flat shingled media elements from the rear conveyor. Finally, a

transport conveyor carries the single flat media elements from the front conveyor to the discharge end.

A first height adjustment mechanism sets a first vertical spacing between the first nip roller and the rear conveyor, and a second height adjustment mechanism sets a second vertical spacing between the second nip roller and the front conveyor.

In the present invention, the expression flat shingled relationship is defined to be one in which the leading edge of a media element overlies the trailing edge of a next adjacent media element.

The rear conveyor travels at a velocity  $V_R$ , the front conveyor travels at a velocity  $V_F$ , and the transport conveyor travels at a velocity  $V_T$ .

There are also three sensors along the feed path to provide signals to control the  $V_R$ ,  $V_F$  and  $V_J$ , so that the media are passed along the feed path with adequate gaps therebetween.

Holbrook discloses a dispenser which is useful for sheet-like articles, such as envelopes (see column 1, lines 37 to 41). There is no need or desire in Holbrook for height adjustment of rollers 169 and 217. In fact, Holbrook teaches that springs 235 and 241 urge the rollers of the first and second frames 161 and 185, respectively, downwards against the conveyor deck (see Abstract).

In rejecting claim 13, the Examiner concedes that Holbrook does not teach or suggest a second height adjustment mechanism (see page 4, third paragraph of Final Office Action mailed June 15, 2006) from which it must follow that Holbrook lacks the feature recited in claim 13 of a second height adjustment mechanism to allow media elements to pass through one at a time as separated media elements. It is this feature that permits the present invention to enjoy the advantage of being useful in separating even large-sized media elements. However, the Examiner seeks to combine Bridges with Holbrook to produce the second height adjustment mechanism of claim 13. The Examiner has argued that it would be obvious for one skilled in the art to modify Holbrook to include a single media separator with a second height adjustment mechanism in view of Bridges.

Bridges discloses a prefeeder that conveys media in a stack therethrough for further processing. Bridges teaches that a nip adjustment knob 44 is used to deliberately

set the distance that the roller 17 can move upward. There is no indication in Bridges of what the further processing of the media stack entails.

Clearly the references when combined do not teach or suggest all the claim limitations of claim 13. Both references fail to teach or suggest use of a second height adjustment mechanism to separate media elements. Neither reference teaches, suggests or even appreciates the advantage of having such a second height adjustment mechanism to permit large-sized media elements to be singulated as does the present invention.

Bridges is only directed to a prefeeder that conveys media in a stack therethrough for further processing. The prefeeder of Bridges is analogous to the coarse media separator of present claim 13, not to the single media separator. There is no teaching or suggestion of a second height adjustment mechanism to allow media elements to pass through one at a time as separated media elements as recited in present claim 13.

Accordingly, it is submitted that since each reference fails to teach or suggest a dispenser having a second height adjustment mechanism as recited in present independent claim 13, that a combination of Holbrook and Bridges cannot teach or suggest the same feature.

The Examiner has also argued that it would have been obvious to combine the teachings of Wilson et al. with Holbrook to arrive at the first, second and third sensor arrangement as claimed in present claim 13.

The Examiner has stated that Wilson et al. teach controlling the speed of belt 18 of input feed 17, aligner 31 and second singulator feed assembly 50 to better enforce gap size between documents.

In Holbrook, the envelopes travel from station 2 along driven rollers 10 to belt 6. Along belt 6, they are input to singulator station 4 comprising first frame 161 and second frame 185. Roller 169 of the first frame 161 receives the envelopes along belt 6 which are then input to roller 217 of second frame 185 and finally output along belt 6 for further processing downstream to stations 8 and 9. Each of the first frame 161 and second frame 185 are pivotally mounted to shaft 173. It is specifically taught that the separation between stations 2, 4, 8 and 9 "is less than the length of the smallest envelope processable by the feeder 1" (see column 2, lines 34 to 36).

Therefore, in Holbrook there is no teaching or suggestion that the speed of the envelopes can be variable as they are input to and output from the singulator station 4. In

fact, during the entire process the envelopes only travel along a single belt, namely belt 6. Further, motor 11 controls both shaft 173 and belt 6, so the belts of the first and second frames and belt 6 are all simultaneously controlled.

It is noted that the BPAI affirmed the objections to the claims under 35 U.S.C. § 112, and it is submitted that the current amendments address the objections. It is also noted that the BPAI reversed the rejections of the claims based on the cited art.

Dependent claims 2 to 6, 8 to 10 and 12 depend either directly or indirectly from independent claim 13, and include all of the limitations of its respective parent claim. Therefore, the dependent claims are believed to be distinguishable over the cited references for at least the same reasons as those given to the respective parent claims.

Respectfully submitted,



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